

## REMARKS

### Claim Rejections - 35 USC §112

The application as filed noted that the external circuit into which the phase switch is inserted has a characteristic impedance of  $Z_0$ . (See, as an example, Specification, page 6). In addition, claim 5, for example, noted that certain switches were connected through half wavelength waveguides that had an impedance equal to the characteristic impedance, namely  $Z_0$ . Accordingly, the Applicant respectfully submits that the cited claim limitation was fully supported by the application as filed. Nevertheless, Applicant has removed the  $Z_0$  impedance limitation from Claims 27-34 in order to broaden those claims. As a result, the Applicant respectfully requests withdrawal of the rejection of claims 27-34.

### Claim Objections - Claims 39-46 and 49-56

Given the comments above with regard to claims 27-34, Applicant also respectfully requests withdrawal of the objection to claims 39-46 and 49-56. Claims 39-46 and 49-56 were originally objected to as dependent on a rejected base claim.

### Allowed Claims and Claim Amendments

Applicant notes with appreciation the allowance of Claims 21-26, 35-38, 47, and 48. The claims have been amended as shown above in order to clarify the structure and operation of the claimed phase switch. As shown in Figure 3, for example, and with regard to claim 21, the phase switch is in place between an input signal port, labeled "IN" and an output signal port, labeled "OUT".

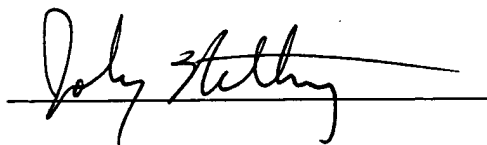
The phase switch has its own input and output ports as shown, as examples, in Figures 1-2. Several claims have been amended to clarify the structures that switch the input signal port and the output signal port to the phase switch's input and output ports (Claims 23-34, as examples). The phase switch's input and output ports may connect to

the input signal port and the output signal port through, as examples, diode or FET switches. Examples of such switches are labeled "D/F" in Figure 3. As also shown in Figure 3, quarter wavelength waveguides may connect one side of each switch to the phase switch's input or output port, and quarter wavelength waveguides may connect the opposite side of each switch to an input signal port or output signal port. (See, as examples, Specification, pages 7-9 and Figure 3). The total length is one half of a wavelength.

### Summary

The amendments presented above are intended to address matters of form in a non-narrowing manner. Applicant respectfully submits that no new matter has been added, and that the proposed amendments place all claims in condition for allowance. The Applicant therefore requests entry of the amendments and a responsive Advisory Action as provided under MPEP §706.07(f). The Applicant invites the Examiner to contact the undersigned attorney for the Applicant by telephone if the Examiner has any questions, comments, or concerns, or if a telephone conference would expedite review of this proposed amendment.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John Nethery", is written over a horizontal line.

John Nethery  
Registration No. 42,928  
Attorney for Applicant

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
(312) 321-4200